



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,244	08/18/2003	Stephen John Dyks	F3314(C)	3282

201 7590 01/11/2006

UNILEVER INTELLECTUAL PROPERTY GROUP
700 SYLVAN AVENUE,
BLDG C2 SOUTH
ENGLEWOOD CLIFFS, NJ 07632-3100

EXAMINER

MAHAFKEY, KELLY J

ART UNIT	PAPER NUMBER
----------	--------------

1761

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/643,244	DYKS ET AL.	
	Examiner	Art Unit	
	Kelly Mahafkey	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/17/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 9 depends on claim 5 and recites "a minimal rotational speed of both rollers". Claim 5 recites both a minimal and maximum rotational speed. One could infringe upon claim 9 with a "minimal rotational speed of both rollers" without infringing on the "maximal" rotation speed of one roller as recited in claim 5. In order to expedite the examination process, examiner will consider the claim as depending on claim 4, which does not recite a specific rotational speed.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent

Art Unit: 1761

protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 2 recites the broad recitation "-3C and -20C", and the claim also recites "-5C and -15C", which is the narrower statement of the range/limitation, and the claim also recites "-7C and -11C" which is an even more narrow statement of the range/limitation. In order to expedite the examination process, examiner will consider the claim as reciting the broad recitation "-3C and -20C".

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1761

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over German OLS 3417196 A1, and in view of Hui (ed.) (Dairy Science and Technology Handbook).

8. Regarding claim 1, OLS 3417196 A1 (OLS) discloses of a method for producing a molded product comprising;

- a. Providing two separate forming elements,
- b. Providing at least one open cavity on a surface of each forming element,
- c. Providing filling devices for filling said cavities
- d. Filling two cavities, one on each forming element

Where in:

- i. The product is allowed to expand outside its cavity
- ii. The two cavities are moved opposite one another and the frozen aerated product in each cavity is pressed against the frozen aerated product of the other cavity

9. OLS teaches of a high rate process of filling expanded items into moulded cavities through an extruder nozzle. Refer specifically to Figures 5 and 6, Abstract,

Art Unit: 1761

that OLS is does not specifically define or limit the products that can be molded or the properties that they may have, as recited in claims 1 and 2.

10. Hui discloses of novelty equipment utilized for ice creams. Hui teaches that the sales performance of novelties has been and continues to be strong. Hui teaches the process of filling molds with expanded ice cream products (i.e. ice cream with overrun) is performed at high speeds. Hui discloses that molds are filled around -4°C , which is near the initial freezing point of "ice cream" into molds that are chilled. Hui discloses that ice cream needs to be at these temperatures so that it will mould quickly when dispensed into a mould. Hui teaches that with molding, a pump arrangement is included. Hui teaches that when pumping it is effective to produce a product that melts more slowly and retains more overrun. Hui teaches of a savings for a 2.75 fluid ounce bar (i.e. mould) at a 65% overrun versus a 100% overrun is nearly 0.3 fluid ounces of mix. Hui also teaches that extrusion can be performed with the molding process at temperatures as low as -10°C , depending on the freezer and its extrusion capabilities. Refer specifically to Pages 251 and 252.

11. Regarding the molding of a frozen aerated product as recited in claim 1, it ~~is~~ would have been obvious to one skilled in the art at the time the invention was made to include a frozen aerated (i.e. expanded) confection, such as ice cream, in the invention as disclosed by OLS. One would have been motivated to do so in order to gain the benefits of extruded molded aerated frozen confections, such as producing an extruded molded food product that would yield a strong sales performance as taught by Hui.

Art Unit: 1761

Because both deal with the process of filling molds with expandable products at high speeds, one would have a reasonable expectation of success from the combination.

12. Regarding the overrun rate as recited in claim 1, it would have been obvious to one skilled in the art at the time the invention was made to include an overrun of 65% since Hui teaches that overrun products which are molded and extruded at 65% increase the amount of the final product (or save a portion of the product that could be lost). To select any particular percentage of overrun would have been obvious depending on the particular degree of savings desired. Because both deal with the process of filling molds with expandable products at high speeds, one would have a reasonable expectation of success from the combination.

13. Regarding claim 2, it would have been obvious to one skilled in the art at the time the invention was made to fill the frozen aerated product into a mould as disclosed by modified OLS at any temperature in view of Hui as discussed in paragraph 17. One would have been motivated to do so depending on the specific composition being utilized and the initial freezing point of that composition in order to have a quick and easy mould, thus creating a decreased processing time. Because both deal with the process of filling molds with expandable products at high speeds, one would have a reasonable expectation of success from the combination.

14. Regarding claims 3-10, OLS discloses of a method for producing a molded product as described in the paragraphs above. OLS teaches that the two separate forming elements are a pair of rollers wherein each roller has a multiplicity of open

cavities on the surface, and the rollers counter rotate so that the respective cavities in the two forming elements lie opposite one another and the frozen aerated products of each cavity are pushed toward one another. OLS teaches that the degree of filling and hence the filling pressure that builds in the moulding cavity is adjusted by varying the moving speeds of the moulds. Refer specifically to Figures 5 and 6, Abstract, Claims 1 and 16, and Pages 1-6. Specifically regarding claims 4-10, OLS teaches of varying rotation speeds (i.e. maximum rotational speeds and minimum (stopped) rotational speeds) depending on the desired degree of filling and pressure in the moulding cavity. It would have been obvious to use any rotation speed depending on the desired degree of filling and pressure in the moulding cavity as taught by OLS.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

16. Arbuckle (Ice Cream 4th Edition) discloses that "very early in history, small manufacturers with imagination often emphasized the possibilities and profits to be gained in making unusual ice cream products, including... molded items."

17. US 4761128 discloses that overrun products require less time to reform than non-aerated products.

18. EP 0923875 B1 discloses of a method for forming chocolate in which the chocolate is dispensed into 2 separate cavities (on two separate chilled rollers), and then the chocolate in the two cavities are pressed together until solidification occurs.

Art Unit: 1761

19. US 5358727 discloses of a method of solving the process of de-moulding roller moulds. US 5358727 disclose that by chilling the mould that de-moulding can easily be performed.

20. EP 1064851 A1 discloses of chilling a roller so that the food product solidifies in a mould (which is on the roller). EP 1604851 A1 discloses that this process is performed in order to prevent the need for further processing.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly Mahafkey whose telephone number is (571) 272-2739. The examiner can normally be reached on Monday through Friday 8am-4:30pm.


22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



11/6/06

Kelly Mahafkey
Examiner
Art Unit 1761



SPE 1761